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Government {1904} of Madras.

REVENUE.

CONFIDENTIAL.

Recd. 27-1- } 1905 Enclosures

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G.O., No. 1420 (Confdl.), 31st December 1904.

DECEMBER.

Signed copy of G.O. given
E.I.

Kept one copy in file to put in supplementary

Periyar Water-supply.

Board's orders on the proposals of the Collector of Madura for the economical distribution of the —, recorded.

CONFIDENTIAL

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

Read—the following Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), No. 394 (Confdl. No. 39), dated 6th October 1904 :—

A. E. Castlestuart Stuart, Esq.,
Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture.

Read—again Board's Proceedings, No. 276 (Confdl. No. 62), (Revenue Settlement), dated 22nd December 1902.

Abstract.—Passing orders on letter from the Collector of Madura reporting on the general question of irrigation of inam and zamin lands under the Periyár project in preference to Government lands.

Read—again Board's Proceedings, No. 211 (Confdl. No. 30), (Revenue Settlement), dated 17th June 1903.

Abstract.—Passing orders on letter from the Collector of Madura reporting on the general question of Periyár irrigation to inam and zamin lands.

Read—again Board's Proceedings, Mis. No. 2452 (Confdl. No. 9), (Revenue Settlement), dated 6th May 1904.

Abstract.—Informing the Collector of Madura that the preparation of the statement regarding the distribution of Periyár project water to zamin and inam lands may be held in abeyance pending submission of the report promised on 1st July.

Read—also the following letter from A. R. KNAPP, Esq., I.C.S., Acting Collector of Madura, to the Secretary to the Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture, dated 29th June 1904, R.C. No. 655 B. & G. (Confdl. No. 32) :—

With reference to the marginally-noted Proceedings of the Board of Revenue, I have the honour to report on certain questions connected with the distribution of water under the Periyár project.

No. 276 (Confdl. No. 62), dated 22nd December 1902.
No. 211 (Confdl. No. 30), dated 17th June 1903.
Mis. No. 2452 (Confdl. No. 9), dated 6th May 1904.

2. The present correspondence had its origin in a proposal made by Mr. Keeling, then Executive Engineer (in a letter No. 565, dated 16th September 1901,

printed in B.P., No. 276, dated 22nd December 1902), that, on grounds of economy of water, the policy of refusing irrigation to zamin and whole inam villages should be reconsidered. The Board was inclined to consider * that, as a matter of principle, it was not necessary to maintain any arbitrary distinction between proprietary and ryotwari lands. After a reference to the Collector, a further report was called for and directions given for the preparation of a fieldwar statement which would show the comparative advantages to be gained by irrigating each plot in the Periyár area. The report then called for has not yet been submitted. In his letter, R.O.C. No. 432 B. & G., dated 8th April 1903, embodied in B.P., No. 211, dated 17th June 1903, Mr. Todhunter submitted for approval the instructions which he proposed to issue for the preparation of the statement required by the Board. Subsequently, however, the Board in its Proceedings, No. 2452, dated 6th May 1904, consented to postpone the preparation of the statement pending the submission of my present report.

* Paragraph 4 of B.P., Mis. No 2335 (Confdl. No. 23), dated 16th April 1902.

3. Although the subject has passed through many stages since Mr. Keeling's proposal first came to notice, it is, I think, desirable even now, for the sake of completeness, to go back to the period prior to Mr. Keeling's letter, and trace briefly the history of the question of giving Periyár irrigation to zamin and whole inam villages.

4. In the early days of the project the policy adopted was to recognise the claims to water of all ryotwari lands in the Periyár area before considering those of proprietary lands. In Board's Resolution No. 594A, dated 30th September 1891, it was found that 114,518 acres of ryotwari and minor inam land, occupied and unoccupied, would be commanded by the project. It was calculated that the supply of water available for first-crop cultivation would be only sufficient for 111,500 acres. It was therefore decided, in paragraph 11 of the Proceedings referred to, that no water would be available for proprietary lands for first crop. As regards second crop, it was estimated that of the occupied lands one-half would take water for second crop. The unoccupied lands, it was pointed out, being entirely at the disposal of Government, could be registered as double crop, and it was calculated that seven-eighths of them would, from their position in relation to the channels, actually be able to receive second-crop water. On these data it was found that about 70,000 acres of Government land would require water for second crop, and the total amount of water available for that crop being estimated as sufficient for 78,000 acres, it was decided that 8,000 acres of proprietary lands might be admitted to irrigation in the second-crop season. The decision of 1892 remained undisturbed until 1896 when, in his letter dated 3rd February 1896, R. on C. No. 5103/Genl. of 1895, Mr. Twigg represented that although the supply of water to proprietary lands for first crop had not been contemplated, there would for some years be water available (evidently because channels and distributaries had not then been fully excavated). He therefore proposed that the proprietors of private tanks should be allowed to have water for their wet lands on application and on payment. Government in G.O., No. 373, Revenue, dated 29th July 1896, accepted his proposal on the condition that each application should be decided according to the probability of water being available for irrigating the whole ayakat of the tank. The procedure then contemplated, namely, negotiation direct with the proprietor of each tank, has not as a matter of fact been carried into effect. Applications have instead been accepted from the actual cultivator, but this has not affected the result. The permission given by Government in the G.O., No. 373, Revenue, dated 29th July 1896, clearly related only to proprietary wet lands. The Public Works Department officers have, however, since found themselves compelled to allow Periyár water to proprietary dry lands affected by drainage, so that in addition to wet lands a considerable area of zamin and inam dry lands is actually now irrigated.

5. Turning now to Mr. Keeling's proposals it is necessary to see what the issue for determination is. It has from the first been clearly laid down that the supply to proprietary wet lands is purely temporary and in the water-rate rules sanctioned in G.O., Mis. No. 279, Revenue, dated 18th March 1902, this is distinctly stated.

At the same time there seems now very little probability that the supply to the proprietary lands already irrigated will ever be cut off. When the concession was first made in 1896 the total area irrigated for long crop was only 72,365 acres. By 1901-02 it had risen to 101,799 acres, and yet no restriction of the supply to proprietary lands has hitherto been found necessary. It is true that both Mr. Keeling and Mr. Cardew (in his letter, dated 26th August 1902, R.C. No. 432/B. & G.) took for discussion the general question whether any proprietary lands should be allowed water; the latter stated the issue as being whether the demands of 28,000 acres of proprietary lands (*i.e.*, the whole area of such lands, wet and dry) could be met. The Board, however, in paragraph 3 of its Proceedings, No. 276, dated 22nd December 1902, has narrowed the question to that of the inclusion or exclusion in the irrigated area of zamindari and inam *dry* lands. Looking to the fact that the full supply of water for either the short or the long crop is even now not completely utilized, and considering that the provision of extra storage capacity above the Peranai dam has now, it is hoped, come within the range of practical politics in connection with the utilization of Periyár power, it may, I think, be taken for granted that no withdrawal of the concession temporarily made to proprietary wet lands will be necessary. This being so, the issue raised by Mr. Keeling may now be regarded as merely affecting proprietary dry lands.

6. The extent of proprietary dry lands in the area commanded by the Periyár channels is reported to be 13,051 acres. Of this area, however, 5,100 acres are already using Periyár water either being allowed it as drainage affected or taking it without permission on payment of penalty. An extent of 1,305 acres is so unfavourably situated for irrigation that for the present there is no question of allowing it water. The additional area of proprietary lands, the provision of water for which is now in question, is therefore 6,646 acres.

7. The question for decision is whether these 6,646 acres can with advantage be irrigated by the Periyár. Before going further, I think it desirable to explain that the area taken by me for consideration, and the 6,000 acres named by Mr. Todhunter in paragraph 4 of his letter, dated 8th April 1903, R. on C. No. 432 B. & G. (in B.P., No. 211, dated 17th June 1903), though differing little in extent are arrived at by very different processes. Acting, I understand, on Mr. Keeling's advice Mr. Todhunter, it would seem, had in view only the extension of irrigation to such proprietary dry lands as could receive water for two crops. The extent of such lands was roughly taken as 6,000 acres. This, however, was too high an estimate: 4,500 acres would have been nearer the mark, and the difference between that figure and the total (6,646) given by me represents the proprietary dry land suitably situated to receive water only for one crop. I cannot find on record any reasons for leaving these lands out of consideration. The explanation appears to be that Mr. Keeling was anxious that the opportunity should be taken to obtain a final decision on another proposal of his which had been put forward (*vide* paragraphs 24 and 25 of Mr. Cumming's letter, R. Dis. No. 535, Revenue, dated 19th July 1901, in B.P., No. 121, dated 6th April 1903), but was still unsettled, namely, the division of the whole Periyár tract into double and single crop areas. The question of irrigating zamin and inam lands thus became merged in the question of fixing the double-crop area, and, in consequence, such proprietary dry lands as did not fall within the "double-crop area" dropped out of consideration. For reasons which will be explained later, I do not think that the time is yet ripe for any such sharp distinction between double and single crop areas as was contemplated. It seems to me preferable to have the question of irrigating proprietary dry lands settled on its own merits, and accordingly I have taken into consideration all the lands of that description in the affected area. Whether a particular plot should receive water only in one or in both seasons must depend on its location and not on any general principles.

8. To decide the matter in issue it is necessary to see how the Periyár water is now distributed and what would be the result of the extra demand made on it by proprietary dry lands. A careful fieldwar investigation made by Mr. Keeling and

confirmed by his successor shows that the area of irrigable land of all kinds, proprietary as well as ryotwari, commanded by the Periyár channels is 119,533 acres. When this calculation was made, however, the whole area covered by abandoned tanks was regarded as irrigable. Making allowance for the bunds of the tanks, and also for the fact that as now decided (B.P., Mis. No. 4623, dated 1st December 1903) a certain portion of these tank-beds will be set apart for communal purposes and not prepared for cultivation, the total commanded area of irrigable land should be taken as 117,500 acres. Further, for reasons which will be explained later, it is now proposed to postpone for some time to come the sale of about 2,200 acres of tank-bed lands unfavourably situated. If this area is also left out of account, the extent of the present irrigable area commanded by the Periyár is reduced to 115,300 acres.

9. Mr. Keeling considered that the water available would for the present be sufficient to irrigate only 100,000 acres of long and 60,000 acres of short crop. The present Executive Engineer, however, takes a rather more favourable view of the duty of the water at his disposal and places the maximum long-crop area at 110,000 acres. According to his estimate, therefore, there are 5,300 acres of the commanded area, for which no water is available. It may be thought that if the idea of irrigating the 6,646 acres of proprietary dry lands were abandoned it would be possible to irrigate the whole of the remaining lands commanded by the project. This, however, is not so, for there are included in Mr. Keeling's ayakat 6,028 acres, which, though irrigable land and nominally commanded by the project, are so unfavourably situated at the tail ends of channels that their regular receipt of Periyár water can not only not be guaranteed but is in ordinary years very unlikely. Apart altogether from the question of including in the scope of the project the proprietary lands which it was not originally intended to embrace, the Public Works officers would have been compelled to ask permission to regard these 6,028 acres as not yet permanently affected by the Periyár. A villagewar statement of the lands, comprising this area of 6,028 acres, is given in enclosure No. 1 to this letter, and the position of lands is roughly indicated in the map which is enclosed. A glance at the map will show that the villages concerned are unfavourably situated for irrigation from the Periyár channels; the area to be excluded does not, however, include the whole of these villages, but only the least favourably situated lands in the villages. It is not easy to explain on paper the exact reasons for proposing each block for exclusion, but an attempt has been made to do so in the remarks in enclosure No. 1. The Special Deputy Collector has made particular enquiries into this subject and entirely agrees with the view of the Public Works Department that the lands in question cannot be safely regarded as "Periyár affected." In these circumstances I recommend that the professional opinion of the Public Works officers be accepted, and the lands in question be transferred from the area affected by the Periyár to that likely to be affected. I have some doubts as to whether it is necessary to apply to the Board for any such permission seeing that, so far as I can ascertain, neither the commanded area as fixed by Mr. Keeling, nor the list of villages affected by the Periyár, has ever been submitted for the approval of any authority higher than the Collector. This being the case it might be held that the local officers were competent to revise the conclusions at which they have themselves arrived; but in all the circumstances I think it wiser to submit the matter for the orders of the Board.

10. I will discuss later in detail the manner in which I propose that these lands should be treated when transferred from the area affected to that only likely to be affected. For present purposes the result of their transfer will be to reduce the irrigable area commanded to roughly 109,000 acres. As has been already stated, the present Executive Engineer considers that the water at his disposal is sufficient to irrigate this area during the long-crop season. If, therefore, his estimate is correct, the whole of the lands commanded, including proprietary dry lands, can be irrigated; in other words all the proprietary dry lands can be admitted to irrigation for single crop without the exclusion from irrigation on that account of any lands which would not otherwise have been excluded. In these circumstances there seems to be no longer any reason to maintain the distinction between proprietary and Government lands.

The local officers are of opinion that no difficulty whatever will be experienced in collecting water-rate on proprietary lands. If difficulties were experienced the provisions of section 2 of the Irrigation Cess Act, VII of 1865, give power to realise arrears under the Revenue Recovery Act.

11. It may be asked, however, how the position, as I have now explained it, is reconcilable with that referred to in paragraph 7 of Mr. Cardew's letter No. 432/B. & G., dated 26th August 1902. It was there pointed out that the provision of water for an approximate area of 28,000 acres of proprietary land would render it doubtful whether any part of the 7,200 acres of Government waste and 6,600 acres of tank-bed lands can at present be irrigated. The answer is, as shown in paragraphs 4 and 6 *supra*, that of the 28,000 acres which Mr. Cardew regarded as an addition to the demands made on the project, three-quarters were already either entitled to receive or actually receiving water. As regards the prospect of being able to sell the remaining area of Government waste and tank-beds, the position is this. Of the waste lands regarded by Mr. Cardew as saleable, 1,167 acres are included in the 6,028 acres which I have asked permission to transfer from the Periyár-affected area. It is obvious from what has been said already that waste lands in this area could not, for the present at least, have been sold as double-crop lands; even if sold as single crop, there is no prospect of their fetching any considerable price. The remaining 6,033 (or according to latest figures 6,226) acres can be irrigated and may be sold, if not immediately, at least when the project has approached nearer to its full development. As regards the tank lands, 2,000 acres are not saleable, either because they consist of the bunds or will be reserved for communal purposes; 2,200 acres represent tanks which, as already mentioned in paragraph 8, it is now proposed to retain unsold for reasons unconnected with any difficulty in irrigating them; the remaining 2,400 acres can be sold as soon as supply channels are provided. Separate and final proposals for their sale are now under preparation for submission to the Board.

12. It will be convenient if at this point I explain what I would propose in regard to the 6,028 acres which I suggest should in future not be regarded actually as "Periyár-affected". Enclosure No. 1 shows the description of the lands making up the total. So long as Periyár water is not actually supplied, I would ask permission to restore, in the case of mamul wet lands, the old classification, cancelling the classification of their irrigation as first class. If in any year Periyár water is actually taken by these lands or by dry lands in the area in question, then Periyár rates would be charged. At the same time I would give no lands in the area on darkhast for the present, in case the proposed extension of storage should allow these areas to be once more brought definitely within the scope of the project. There are 87 acres of lands assigned on darkhast and registered as double crop included in the 6,028 acres to be removed from the ayakat: in regard to these it will not be necessary to make any change in registry. It will suffice to grant annual remission of the difference between dry and wet assessment so long as water is not supplied.

13. I have endeavoured in paragraph 9 to make it clear that the exclusion from the Periyár-affected area of 6,028 acres at the tail ends of the channels and the extension of irrigation to proprietary dry lands are not to be regarded as cause and effect. In case, however, the line of argument adopted should not be regarded as convincing, it may be well to point out that, judged by the criteria adopted in paragraph 3 of B.P., No. 276, dated 22nd December 1902, the inclusion of proprietary lands even at the cost of excluding the others would be justified. The area of proprietary lands to be given irrigation being greater than that of the lands to be excluded it may be taken for granted that the irrigation of the proprietary lands will lead to a greater crop outturn, the more so as a portion of these lands will be in a position to raise two crops. Financially, too, their inclusion is desirable. The 6,646 acres, if all irrigated, will pay a water-rate of Rs. 5 per acre, or Rs. 33,230 per annum. The Executive Engineer considers that out of the 6,646 acres, about half will be in a position to receive water for two crops. Assuming, however, that only half the land which can raise two crops does so, the second-crop charge, at Rs. 3

per acre, will amount to Rs. 4,984, making Rs. 38,214 in all derivable from these lands. On the other hand, the loss of revenue from the exclusion of the 6,028 acres will be as follows:—

	RS.
Difference between 1st group wet rates and former wet rates on 2,206 acres of mamul wet land (at an average of Rs. 2–8–0 per acre) ..	5,500
Loss of water-rate on 189 acres of single-crop dry land cultivated as wet (at Rs. 5 per acre)	945
Total ..	6,445

The remainder of the 6,028 acres is made up of (*a*) 363 acres of tank-bed which, in any circumstances, it is not now proposed to sell, (*b*) 798 acres of dry lands and 1,305 acres of inam lands which will not be affected by the change, and (*c*) 1,167 acres of waste which might conceivably have been sold. If they had been sold, however, they would probably not have fetched more than Rs. 50 per acre, or Rs. 58,350 in all. Their assessment at average double-crop rates would have been Rs. 8–4–0 per acre or Rs. 9,628 per annum. Even assuming that the change proposed involves the forfeiture of these receipts, the maximum loss incurred will be Rs. 16,073 of annual revenue, together with sale price foregone, Rs. 58,350. It is clear that even this loss would be more than covered by the annual increase of Rs. 39,614 expected from the irrigation of proprietary dry lands.

14. The supply or refusal of water to proprietary dry lands being a matter entirely in the hands of Government, it would be possible to rule that irrigation will only be allowed to such lands on condition that water for both crops is taken or at least paid for. This would be consistent with the policy adopted of registering all newly-occupied lands as double-crop wet. For reasons which appear in paragraph 16, however, it is not desirable to tie the hands of the Engineers more than can be helped, or to oblige them to supply water in the short-crop season to any isolated plot. I would therefore propose to allow proprietary dry lands to be irrigated for one crop only, making it clear, however, that the permission is only temporary and that at some future date, when short-crop water becomes available, payment for two crops may be insisted on.

15. I can now pass to the other problems which, as mentioned in my letter No. 432/B. & G., dated 30th March 1904, are awaiting settlement. The first of these is the determination of the double and single crop areas, already alluded to in paragraph 7. The matter was placed before the Board by Mr. Cumming, who was in favour of Mr. Keeling's proposal. The Board in paragraph 6 of B.P., No. 6660, dated 13th November 1902, mentioned the proposal as under investigation and promised a further report to Government. The definite proposals expected from Mr. Keeling have not, so far as I am aware, been submitted, but Mr. Todhunter's letter in B.P., No. 211, dated 17th June 1903, indicates their nature. Mr. Keeling found that out of the 100,000 acres which he calculated could be irrigated for a long winter, or *kalam*, crop, only 60,000 acres could receive water also for a short summer, or *kodai*, crop. To make the most economical use of the limited water he desired to concentrate it round the principal channels where wastage by evaporation would be minimised. He therefore selected an area of 72,000 acres so situated, any 60,000 acres of which could, in his opinion, economically receive short-crop water. This he proposed to designate the "double-crop area": the remainder of the ayakat was to be the single-crop area and was ordinarily to receive no water for a second crop. Regarded merely from the standpoint of economy of water Mr. Keeling's proposal was undoubtedly sound. A reference to the statistics of actual irrigation during fasli 1312, however, suggests a very strong practical argument against its adoption. It will be seen that although water is available for 60,000 acres of short summer crop, a second crop was in that fasli raised only on 32,000 acres and of this about 3,000 acres actually lay in Mr. Keeling's single-crop area. Even allowing for wastage of water in irrigating these latter lands, it is clear that there was a great deal of water available which

might, if there had been any general demand, have been used to raise a short crop in the "double-crop area". There is, however, no such demand, and Mr. Keeling's assumption that, if a double-crop area of 72,000 acres is selected, 60,000 acres or five-sixth of that area will take water for two crops is certainly not justified by experience. The fact is that a wish to raise two crops is rather the exception than the rule. Granting that before long the construction of roads will allow ryots to transport more easily and cheaply the manure needed for their short crop, and granting that the people may gradually be persuaded to accept the change of methods and seasons which the raising of a three months' crop in June—September involves, there will still remain the difficulties (1) that much of the land will not for sometime to come stand two crops continually, (2) that the small cultivator has not, as a rule, sufficient capital to provide the manure required to counteract the strain of a second crop, and (3) that the larger owner will not, or cannot, employ the labour necessary to start cultivation on his entire holding immediately on the opening of the reservoir, and so get all his lands under cultivation for a short crop in time to reap it before the winter season begins. A reference to paragraph 11 of B.P., No. 594A, dated 30th September 1891, will show that in the forecast then framed it was only anticipated that 1 acre out of every two of occupied land would raise a second crop. The personal element, left out of account by Mr. Keeling, was no doubt considered in 1891, and the view then taken was, I submit, correct. The views of 1891 are, however, entirely opposed to Mr. Keeling's ideal, and if they are maintained, it is clearly impossible at present to fix, as Mr. Keeling proposed, a limited area and declare that in that area alone second-crop water will be allowed. The demand in that area must vary, even if only slightly, from year to year, and the refusal of second-crop water to the single-crop area, even in years when the double-crop area does not take the full supply set apart for it, would, I need hardly point out, involve great waste of water. Mr. Keeling doubtless intended that the lands in his double-crop area should at the next settlement be all registered as double crop, and meanwhile should, whenever possible, be forced to pay double-crop rates, whether they took water or not. From the fiscal standpoint this result would have been satisfactory, but the equally important problem of utilising the water to its fullest extent would have been left untouched. Mr. Keeling's plan would also have reduced the labour involved in distributing the water. I venture, however, to think that the very opposite procedure is what is required. So far from selecting once for all the short-crop area, the distribution of water should be fixed afresh for each year, shortly before the reservoir is opened, with reference to the demand for that year. In the case of dry lands, applications for water are already prescribed. I would insist on an application for short-crop water also in the case of wet lands registered as single crop, as is done in some other districts (*vide* B.P., No. 23, dated 26th January 1903). Excepting the comparatively few lands sold or given on darkhast and registered as double crop, the Executive Engineer would then have complete information each year as to the places where demand for short-crop water existed. He could thus distribute the water to the best advantage, complying or not with applications according as they represented a sufficient concentrated area to justify his sending water down the particular supply channel or filling up the tank concerned. The present Executive Engineer concurs in this view and in the present year is following the procedure indicated. If the Board concurs, I beg that this procedure may be approved and the suggestion of fixing double and single crop areas definitely set aside. A decision on the question is very desirable; for, Mr. Keeling's view, though never formally recognised, has been to a great extent adopted in the local offices with the result that much confusion of ideas has arisen.

16. The proposal to fix a definite double-crop area and allow no short-crop water to lands outside it involved a change in the registry from double to single crop of any lands, assigned on darkhast or sold under the Periyár rules, which were situated outside the double-crop limit. This result was foreshadowed in paragraph 6 of Mr. Todhunter's letter in B.P., No. 211, dated 17th June 1903, it being understood that of the 3,000 acres which, in paragraph 4 of that letter, it was proposed to exclude from double-crop irrigation, about 1,500 acres would be lands registered as double crop.

In my view, as already expressed, no such step is necessary. At the same time I should mention that the present Executive Engineer (M.R.Ry. A. V. Ramalinga Aiyar), though he agrees with me that a final determination of double and single crop areas is impossible, is of opinion that some of the lands now registered as double crop should have their registry changed. His contention is that their registry as double crop imposes on the Engineer an obligation to supply them water in both seasons, and that where a small area of lands thus registered is situated at a distance from the channels, or is surrounded by lands which do not receive, and do not wish to receive, short-crop water, it is most uneconomical to have to supply them. When the decision to sell and assign all unoccupied lands as double crop was arrived at, it was anticipated that the holders would be forced to raise two crops, and that their neighbours, though under no such compulsion, would follow their example (*vide* paragraph 12 of the letter of the Periyár Special Deputy Collector at page 8 of G.O., No. 541, Revenue, dated 15th August 1899). Had this anticipation been fulfilled, each plot of sold or assigned land would have formed the nucleus of a large area of double-crop cultivation, and the concentration of water in blocks during the short-crop season, which is so desirable, would have been automatically secured. As it is, however, small plots of double-crop land now stand isolated in the middle of areas, the owners of which do not attempt a short crop. When the supply of water presents any difficulties it has not been worth while for the Public Works Department to make special and expensive arrangements to supply these plots, and, as a result, they at present receive either no water or merely a precarious supply during the hot weather. What the Executive Engineer now asks is that means should be found to relieve him of the obligation of supplying these lands for the summer crop if it is not economical to do so. The area in regard to which he thus asks for a free hand amounts to 1,487 acres, of which 989 acres represent assigned and 498 acres sold lands. In the case of the former no great difficulty arises. Though registered as double crop under a general order no guarantee was given that they would receive double-crop water. Any land asked for was assigned without reference to its position: in some cases the lands so assigned were more or less unirrigable, and in one extreme instance, which has recently come to my notice, the darkhastadar asked for, and was given, a piece of rocky hillock which could under no circumstances be irrigated. All that is necessary in the case of assigned lands is that the Collector should have full power to grant remission of second-crop charge to any such lands to which the Executive Engineer considers it uneconomical to supply water. Such remission is, as a fact, now being granted on the ground that no water was available, but I think it would be well if the practice were formally recognised. As regards lands sold, the position is somewhat more delicate. They were practically guaranteed water for two crops, and the omission to supply them might in some cases lead to a claim for the refund of the purchase amount and of the money spent in reclamation. My view in regard to them is that the holders should be induced, if possible, to apply for the change of registry. If they will not do so, then arrangements must be made to supply them with water even if a constant supply cannot be assured. The failure of a constant supply could hardly give rise to a suit: the deliberate cutting off of all supply for the short crop might do so. The areas actually involved are small, but my fear is that one suit in regard to a land refused water might raise the whole question of whether double-crop water was guaranteed at the time of sale, and thus lead to suits from all the purchasers who think that the nine months' supply now allowed is insufficient for two crops. Already I hear of one purchaser (the Hon'ble G. Srinivasa Rao) who proposes a suit on this latter ground; the whole matter therefore needs careful treatment.

17. The position of the sold lands in regard to which the Executive Engineer desires to be relieved of the obligation of supplying second-crop water is roughly shown in the map enclosed. A list of the lands is given as enclosure No. 2 and contains the Executive Engineer's reasons against each item. It will be seen that in the case of the marginally-noted villages, the remark made by the Executive Engineer is only that the lands are saline. This is in itself not a sufficient ground for proposing their

Kovilpappagudi.
Vilangudi.
Pothumbu.
Boothagudi.
Thamaraipatti.

transfer from double to single crop. Again in regard to the 101·04 acres in Tallakulam village, the Executive Engineer includes these in his list, mainly because to reach them it is necessary to take water through a large extent of inam lands. As matters stand at present, therefore, it is not economical to supply them with water for *kodai* crop. I think, however, that as regards these the Executive Engineer should reconsider the position. Tallakulam is close to Madura, and the position of the lands close to the markets and well served by roads, makes them very suitable for highly profitable cultivation. We should therefore, I think, make special efforts, even at the cost of providing fresh distributaries, to supply water to this village and encourage double-crop cultivation on the mamul wet lands, with a view to classifying the whole village as "double-crop wet" at the next settlement. As regards the remaining lands mentioned in enclosure No. 2, I request permission to transfer them to single crop if the owners agree, subject however to the distinct condition that they will be liable to be reclassified as double crop at the next settlement. In case a doubt should be felt as to the propriety of departing in any way from the decision that all lands sold or assigned should be registered as double-crop lands, I venture to point out that in the original forecast of 1891 the Board itself drew attention to the fact that tail end lands could not be so registered (*vide* paragraph 11 of B.P., No. 594A, dated 30th September 1891). It accordingly reckoned only $\frac{7}{8}$ of the then unoccupied area as likely to be registered as double-crop land. This aspect of the case was lost sight of when it was proposed later to sell and assign all the lands as double crop in the hope that cultivation would follow the registry; but I venture to think that the view of 1891 was the more correct view.

18. If the foregoing proposals are approved much difficulty now experienced in making the most economical use of the kodai crop water will be removed. There is however one important obstacle to the full realization of the capacity of the project for short-crop irrigation which demands notice. Although of all the lands which are favourably situated for raising the kodai crop less than half actually do so, and although in ordinary circumstances it should be possible to pass on to less favourably situated lands water which a more favourably situated area declines to use for kodai crop, the Executive Engineer cannot at present with safety take this course. When the water is first let into the channel at the beginning of June it flows freely throughout the whole ayakat and some even of the most distant lands receive it. From the beginning of July, however, to the end of August very large quantities of it are taken in the higher reaches and supply to the lower reaches becomes precarious. In so far as water is taken for a short kodai crop its use is legitimate; but much of the water taken from July onwards in the upper reaches is taken, illegitimately as I hold, not for kodai but for purposes of kalam or single-crop cultivation. What appears to be necessary to remedy this evil is a definition of the short and long crop seasons. Before the advent of the Periyár these seasons were distinct. Though occasional showers might give a tank supply in August sufficient to raise seedlings, the long winter crop cultivation could, as a rule, not safely be undertaken before September at the earliest. It would be reaped about February, and such second crop as was then possible was raised between April and June or July. As was shown in paragraph 9 of Board's Resolution, No. 29, dated 22nd February 1896, the conditions of the Periyár reservoir made it necessary to alter this arrangement, and, following the practice in Tanjore and Trichinopoly, to provide for an early crop between June and October and a later crop between October and March. It was clearly intended that the limited quantity of water-supply from June to August should be utilised for a short crop on lands on which it was afterwards intended to raise a long crop. It was not contemplated that it would be used on single-crop lands, for which the Periyár supply from October to March, supplemented by the rains, was expected to provide. The physical impossibility of preventing a cultivator from taking water for his long crop in July or August, when water is let into the channels for short crop on his neighbour's land, has been taken advantage of principally by those owners whose labour supply is insufficient. By taking water early to some lands they are able to spread over 2 or 3 months the preparation of their lands for the long crop; they thus cultivate their entire holding with much fewer labourers than if, as formerly,

they had to wait for the rains to come and then push on the cultivation of the entire holding simultaneously. I do not see why in thus saving cultivation expenses these ryots should be allowed to enjoy the water which is not intended for their use. I would submit that in fixing the charge for single-crop water in the Periyár area, and in raising the classification of the mamul wet lands, what was guaranteed was not an earlier or necessarily longer supply than before, but a certain and continuous instead of a precarious supply during the mamul period of irrigation. If this view is accepted Government would now be fully justified in declaring that the kalam or long-crop season under the Periyár begins only on September 1st; and that water taken before that date for a single crop is taken out of season. On the analogy of the ruling contained in B.P., No. 8, dated 8th January 1904, I was myself inclined to propose that land irrigated before the commencement of the proper kalam season (before 1st September) should be regarded as irrigated for two crops. The Executive Engineer however suggests a less stringent measure, and proposes that half the second-crop water-rate, that is to say, a penalty of Rs. 1–8–0 an acre, should be charged for water taken before the 15th August to irrigate lands on which only a kalam crop is to be grown. Such a rule would in my opinion not involve any hardship, and so far as I can learn, it would not be regarded as such. I therefore strongly recommend it for adoption. Its introduction will aid the Executive Engineer in deciding at the beginning of the season where water can best be sent. It will also to some extent encourage the raising of kodai crop in the areas where water is already freely available, and, when that effect is not secured, Government will at least obtain some return for the water supplied out of season which at present brings in no revenue.

19. In paragraph 8 *supra* it was mentioned that a considerable area of the tank-beds which it was originally proposed to sell would not for the present be recommended for sale. The tanks with respect to which this change of policy is proposed are those in the less favourably situated portions of the ayakat. My reason for seeking to retain them unsold is this. The Madura ryot is, as a rule, not yet convinced that 9 months' supply is sufficient for raising two crops. At the head of the ayakat the water is now supplied for fully 9 months, but in the lower reaches the period of supply gradually dwindles so that some villages receive not more than 8½ months' supply. In these instances, as also in the case of lands which are only allowed water for one crop, it seems unwise to abandon the tanks which, however limited their capacity, may still collect some water which will supplement the Periyár supply, or, in the case of single-crop villages, will allow of the raising of a short dry crop as before the Periyár works were opened. The Executive Engineer concurs in this view. The 2,400 acres of tank-beds which, as stated in paragraph 11, may be sold are situated in the area where a full 9 months' supply can be assured. There is therefore no object in retaining them.

20. I have endeavoured in this letter by using the expressions 'kodai' and 'kalam', or long and short crop, to avoid the confusion which arises when the terms first and second crop are applied to the Periyár area. The first crop raised in point of time is the short crop from June—October, but much of the land does not raise a crop in this season. The figures of first crop, as given in the annual irrigation statistics, cover therefore crops raised partly in this and partly in the winter or long-crop season. Again it is impossible to speak with accuracy of a first or second crop season, for while the summer months can clearly only be described as first-crop season, the cultivation in the winter months includes a large proportion which is raised as first and only crop. For practical purposes the winter crop is even at present treated as the first crop. If on a mamul wet holding of 5 acres, 2 acres only are cultivated in June—October, fasljasti is now charged only on that extent. If, however, the summer season were to be treated as the first-crop season, the whole area would have to pay its wet rate for the summer crop irrespective of whether the whole was cultivated or not, while the whole extent would pay fasljasti for the winter crop. Moreover if, as suggested in paragraph 15 *supra*, applications for permission to take water in the short-crop season are required of mamul wet (single crop) lands this can only be done if the short crop is recognised as the second crop. To put an end to the

confusion, I would suggest that, if there is no objection, chronological sequence should in this case be left out of account and the short summer crop designated as second crop. Cases where only that crop is raised are practically non-existent, so there need be no objection on the ground that a second crop might be found in some cases without a first crop.

21. To sum up, I recommend—

(i) that the restriction on supplying Periyár water to proprietary lands commanded by the project should be withdrawn (paragraph 10);

(ii) that 6,028 acres of irrigable lands at the tail ends of the channels, originally regarded as commanded by the project, should now be regarded as only likely to be affected and treated accordingly (paragraphs 9 and 12);

(iii) that the proposal to recognise definite double and single crop areas should be dropped (paragraph 15);

(iv) that applications for water for the short crop should be insisted on in the case of mamul wet lands (paragraph 15);

(v) that whenever, in the villages named in enclosure No. 2, the Executive Engineer finds it impossible economically to supply water to any field registered as double crop, the Collector should be authorised to transfer the field to single crop, provided the owners agree, and subject to restoration to the double-crop class at the next settlement (paragraph 17);

(vi) that the *kodai* and *kalam* seasons should be fixed and that any person taking water for a kalam crop before August 15th should be subject to a penalty (paragraph 18);

(vii) that the sale of 2,200 acres of tank-beds in the tract unfavourably situated for irrigation should be postponed (paragraph 19).

22. With reference to paragraph 1 of B.P., No. 211 (Confdl. No. 30), dated 17th June 1903, I regret to find that the determination of the mamul ayakat of tanks in inam and zamindari villages has not progressed. From certain papers on record I was under the impression that an enquiry was proceeding. The Special Deputy Collector has now been requested to see to the matter without delay. I may mention, however, that, should the proposal to allow irrigation to proprietary dry lands be approved, the decision as to the mamul wet ayakat will be much simplified. The cultivators now collude with the proprietor to treat their dry lands as wet, so as to get Periyár water: they consent to pay wet rates to the proprietor for this purpose. But if dry lands are also eligible for irrigation the cultivator will undoubtedly seek to prove that his lands are dry, so that instead of the heavy wet-rate payable to the proprietor, together with a charge of Rs. 4 for Periyár water, they may pay only the proprietor's dry rate with water-rate at Rs. 5 to Government. Their interests will thus be to assist the authorities in determining the real mamul wet ayakat.

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Enclosure No. 1.

Statement showing the lands included by Mr. Keeling in the Periyár ayakat which it is now proposed to treat as not affected.

Serial number.	Names of villages.	Government lands. Occupied. Wet.	Government lands. Occupied. Dry.	Government lands. Waste.	Government lands. Tank-bed.	Government lands. Total.	Proprietary lands.	Remarks.
	Madura taluk.	ACS.	ACS.	ACS.	ACS.	ACS.	ACS.	
1	Sengottai ..	64	55	346	10	475	..	East of Madura. The village is situated at the entrance end of the Kiranur distributary which is supplied from the tenth branch channel. The wet area includes 3·24 acres of land assigned as double crop. It is quite impossible for kodai crop water to reach the village, and in kalam season the water which reaches is only sufficient slightly to supplement the tanks at irregular intervals and not to allow any dry lands to be irrigated.
	Mélúr taluk.							
2	Punjuthi	370	31	49	55	505	..	South-west of Mélúr, near the Mélúr-Sivaganga road. The whole of this village is at present regarded as affected by Periyár. It is very far from the main channel system and water reaches it with difficulty. There are 11·41 acres of lands assigned and registered as double crop.
3	Thovarangulam ..	178	54	253	18	503	..	South-west of Mélúr near the Mélúr-Sivaganga road. Too far from the main channel to receive water regularly without great expenditure of water.
4	Keeranur	151	24	137	6	318	..	South-west of Mélúr near the Mélúr-Sivaganga road. Includes 34·21 acres of assigned lands.
5	Attapatti	105	30	49	25	209	..	North-east of Mélúr. The fact that this village was declared in G.O., No. 82, Revenue, dated 6th February 1901, not to be Periyár affected, has apparently been overlooked by the Executive Engineer who has retained it in his ayakat statement. To save altering the figures throughout, I have retained it among the areas now to be excluded.
6	Ambalagarenpatti ..	667	31	187	55	1,280	..	South-east of Mélúr and served by a long distributary taking off from lower down the twelfth branch channel. The village includes 3·47 acres of assigned lands. No regular supply even of long-crop water can be assured.
7	Orangampatti ..	100	30	28	20	178	..	South-east of Mélúr. The whole village is now regarded as Periyár affected, but the lands in the extreme east of the village are too far distant from the twelfth branch channel to receive a regular supply and these it is proposed to exclude; 6·26 acres of assigned lands are affected.
8	Kurichipatti ..	420	358	113	174	1,065	..	The reasons given against No. 7 apply. There are no assigned lands.
9	Malampatti ..	151	34	5	..	190	..	East of Mélúr. The whole village is now regarded as affected but 190 acres (including 29·27 acres of assigned lands) under the eleventh distributary, twelfth branch channel, are unable to receive a regular supply.
10	Kattayampatti *alias* Veppadappu.	..	..	..	..	..	1,305	Entered in the map as Veppadappu. South of Mélúr and east of the Mélúr-Sivaganga road. An inam village at a distance from the tail end of the Chunnambur offtake; cannot be regularly supplied.
	Total ..	2,206	987	1,167	363	4,723	1,305	
			6,028 acres.					

Enclosure No. 2.

List of lands sold as double-crop wet lands but proposed to be transferred to single crop.

Serial No.	Names of villages.	Extent sold.	Remarks.
	Madura taluk.	ACS.	
1	Kovilpappugudi	107·52	Lands are saline.
2	Vilangudi	67·99	
3	Pothumbu	74·63	
4	Boothagudi	30·38	
5	Tallakulam	101·04	Tail-end of channels passing through inam lands.
6	Kalikappan	5·33	Tail-end.
7	Tamaraipatti	16·49	Saline lands.
	Total ..	403·38	
	Mélúr taluk.		
1	Thekkutheru	10·20	Tail-end.
2	Surakundu	17·59	
3	Mélúr	62·37	
4	Navinipatti	5·11	
	Total ..	95·27	
	Grand total ..	498·65	

Resolution—No. 394 (Confdl. No. 39), dated 6th October 1904.

The papers read above deal with the question of the economical distribution of the Periyár water-supply.

2. In his letter dated 16th September 1901 printed in B.P., No. 276, dated 22nd December 1902, Mr. Keeling, late Executive Engineer, Madura division, stated that in his opinion the Periyár supply was not sufficient for irrigating with certainty more than 100,000 acres of long crop and 60,000 acres of short crop, and suggested that a decision should be arrived at on the question " whether inam and zamin lands suitably " situate for double crop * * * shall or shall not be supplied (with irrigation) in " preference to Government dry land situate where only one crop can be grown." On carefully considering the reports of the Special Deputy Collector and Collector, the Board was of opinion that it was impossible to lay down any hard and fast rule in the matter, and that in order to decide what lands should receive irrigation, it was necessary to make a detailed examination of the areas commanded in each village and calculate the results attainable by every possible scheme of water distribution. The Collector was requested to instruct the Deputy Collector to undertake this examination and to report the results in due course. In its Proceedings No. 211 (Confdl. No. 30), dated 17th June 1903, the Board approved the instructions which the Collector proposed to issue for the guidance of the Special Deputy Collector. At the request, however, of the Acting Collector, Mr. Knapp, the preparation of the necessary statements was deferred pending the submission of his present report.

3. Mr. Knapp has clearly set out the points for consideration, and the Board proceeds to pass orders thereon :—

Recommendations (i) *and* (ii) *in paragraph* 21 *and paragraphs* 5 *to* 11 *and* 13 *of the report.*—The Collector states that from the outset the Periyár water has been taken for proprietary *wet* lands, on the understanding that the supply was allowed as a temporary arrangement. No necessity has yet arisen for discontinuing the supply, and, in the Collector's opinion, that contingency will not occur in the future. The extent of proprietary *dry* lands in the area commanded by the project is 13,051 acres, of which 5,100 acres already take Periyár water either without permission on payment of penal

water-cess, or because they have, owing to percolation, been rendered unfit for the cultivation of dry crops. Excluding this extent, and also 1,305 acres, which are unirrigable, there remain 6,646 acres favourably situated for irrigation during the long-crop season, on a portion of which short crop can also be grown. On the other hand, the area now regarded as irrigable includes 6,028 acres of Government and agraharam lands, which though nominally commanded by the project, are yet so unfavourably situated at the tail-ends of the channels, that they cannot be provided with adequate supply even during the long-crop season in ordinary years. The Collector has forwarded a statement of the lands by villages and a map showing their position. The Special Deputy Collector has made careful enquiries on the subject and fully agrees with the officers of the Public Works Department that the lands should be excluded from the category of lands affected by the Periyár. The Board accordingly accepts the Collector's recommendation that irrigation should be allowed to the 6,646 acres of proprietary dry lands and that the 6,028 acres should be excluded from the irrigable area under the project. Making the necessary alterations on this account, the net irrigable area comes to 109,272 acres, whereas the maximum area for which Periyár water can at present be supplied for the long crop is 100,000 acres according to the estimate of Mr. Keeling, and 110,000 acres according to the more favourable view of the duty of water taken by the present Executive Engineer.

4. *Paragraph* 12 *of the report.*—In regard to the 6,028 acres to be excluded from Periyár irrigation, the Collector's recommendations are:—

(i) That the enhanced assessment imposed on the Government wet lands with reference to their situation under a first-class source of irrigation should be cancelled and that they should be assessed at the rates in force previously to the introduction of the project.

This is sanctioned subject, however, to the proviso that the existing rates will be restored when the lands are again brought under the project.

(ii) That in the case of 87 acres of dry lands assigned on darkhast as double-crop wet, an annual remission of the difference between the dry and wet assessments may be granted so long as water is not supplied.

The Board accepts the proposal on the assumption that the Collector considers it inexpedient to transfer them once for all to dry.

5. *Paragraph* 14 *of the report.*—To the 6,646 acres of proprietary dry land, the Collector proposes to allow irrigation for one crop only, on the understanding that the permission is temporary. This is approved. As the water-supply can be withheld from these lands at any time, the Board considers it unnecessary to add the further condition that payment of water-cess for two crops will be insisted on when water for short crop becomes available. In this connection the Collector is requested to see that, without application from the proprietors, Periyár water is not let into any private tank merely for the irrigation of the proprietary dry lands. An arrangement of this kind would be prejudicial to the interests of Government, as the proprietors might utilise the water for the irrigation of their mamul wet lands under the tanks. For the same reason it is essential that even in cases where Periyár water is already carried through private tanks, without the application of the proprietors, for the supply of Government tanks lower down, other arrangements for filling the latter should, wherever possible, be made.

6. *Recommendations* (iii) *and* (iv) *in paragraph* 21 *and paragraph* 15 *of the report.*—The Board fully concurs in the Collector's opinion that Mr. Keeling's proposal to determine once for all the double and single crop areas under the Periyár channels, though undoubtedly sound from the theoretical standpoint of economy of water, is unworkable in practice. It should accordingly be definitely abandoned, and in lieu thereof the practical suggestion made by the Collector that applications for "short-crop" water should be called for every year not only in respect of dry lands as heretofore, but also of single-crop wet lands, should be adopted, and the results communicated to the Executive Engineer to enable him to distribute water in the most economical manner.

7. *Recommendation* (v) *in paragraph* 21 *and paragraphs* 16 *and* 17 *of the report.*—Of the lands included in the irrigable area, it is in the opinion of the Executive Engineer not possible to supply water for "short crop" economically to 989 acres *assigned on darkhast*, and to 498 acres *sold*, as double-crop wet. The Collector suggests that in the case of the former class of lands the present practice of remitting the second-crop charge may be continued. The Board accepts his suggestion. In regard to the latter class of lands, the Executive Engineer's proposal is to transfer them to single crop; but, as observed by the Collector, this cannot be carried out except with the consent of the owners thereof. In cases where such consent is given, the Collector is authorised to sanction the transfers subject to the condition that the lands will be liable to be reclassified as double crop whenever the Periyár supply is improved. In other cases, endeavours should be made to assign in exchange for such lands, where possible, other lands which can ordinarily be irrigated for two crops. For the reasons assigned by the Collector in paragraph 17 of his letter, the Board concurs with him in thinking that water should be supplied to the 101·04 acres in the village of Tallakulam during the short-crop season even at the cost of providing fresh distributaries.

8. *Recommendation* (vi) *in paragraph* 21 *and paragraphs* 18 *and* 20 *of the report.*—For the reasons stated by the Collector, the Board sanctions his proposal to fix the period intervening between the months of June and September as the season for growing the short crop and October to March as the season for growing the long crop. It has been the practice for some ryots to take water during the short-crop season to lands on which they intend to grow a long crop in order to economise labour by spreading the preparation of the land over two or three months. The Collector suggests that such irrigation before the 15th August may be charged Rs. 1–8–0 an acre, which is half the water-rate payable for the irrigation of the short crop. This is approved on the analogy of the practice obtaining in similar circumstances under the Kurnool-Cuddapah canal. His further recommendation to designate the short summer crop as the second crop is also accepted.

9. *Recommendation* (vii) *in paragraph* 21 *and paragraphs* 8, 11 *and* 19 *of the report.*—The irrigable extent referred to in paragraph 3 above includes certain areas where direct irrigation from canals for the full period of nine months, necessary for growing two crops, cannot be assured. The Collector considers it necessary to retain in their present condition the tanks situated in these areas and accordingly suggests the postponement of the sale of the 2,200 acres covered thereby until the contemplated provision for storage of extra water-supply above the Peranai dam is actually made. The suggestion is approved. Of the 2,400 acres of tank-beds, for the sale of which proposals are promised, the sale of 257·85 acres has since been proposed by the Collector and sanctioned in B.P., Mis. No. 4587, dated 23rd August 1904; his proposals in regard to the remaining area will be awaited.

10. Adverting to paragraph 22 of the report, the Collector's attention is invited to paragraph 4 of B.P., Mis. No. 3595, dated 11th July 1904. His proposal to allow irrigation to proprietary dry lands having been approved in paragraph 3 of these Proceedings, he is requested to see that the settlement of "mamul wet" lands is carried out expeditiously and brought to completion at an early date.

(True Copy and Extract.)

(Signed) V. K. RAMANUJA CHARI,
Secretary.

To the Collector of Madura.
,, the Secretary to Government, Revenue Department,
with a plan, to be returned, and with a spare copy of
B.P., No. 23, dated 26th January 1903.

Order—No. 1420 (Confdl.), Revenue, dated 31st December 1904.

Miscellaneous.	Recorded.

(True Extract.)

(Signed) J. N. ATKINSON,
Ag. Secretary to Government.

To the Board of Revenue (Revenue Settlement).
" Public Works Department (Irrigation).

Exd. C. M. Thumbuswamy.

45 Copies.

6

N O T E.

Supply of Periyar water to inam and zemin lands.

Jari Kondiampatti.
Jari Kannanendal.
Sirudur.
Nagannakulam.
Tirupalai.

In September 1900 some of the ryots holding lands in the marginally-noted inam villages in Madura Taluq presented petitions to the Board of Revenue and Government requesting that Periyar water might be supplied to dry lands in their villages which have been converted into wet. They stated that in faslis 1307, 1308 and 1309 permission was granted to them to take Periyar water but that in fasli 1310 they were informed by the P.W.D. that water would not be supplied. The Collector to whom the petitions were forwarded for report informed the Board of Revenue - that when water was supplied in -- Faslis 1307 and 1308 the ryots were - distinctly told that the supply was purely temporary and that it was -- liable to be withdrawn in any year in which it was not considered sufficient for inam lands. In 1309 they took water without permission and were charged penal water-rate.

In fasli 1310 the Executive -- Engineer closed the sluice supplying the petitioners' lands to prevent them from taking water without permission. The Collector stated that the Executive Engineer was of opinion that -- permission should be given to the --

ryots to permanently convert their lands into wet, but that he was not prepared to recommend the course, as it might lead to the sale of large extents of inam and zemin waste lands for wet cultivation, which would interfere with the sale of Government waste lands. The Collector, however, considered that if water was given every year as a matter of course the ryots would not realize any difference between this concession and permanent conversion, the applications of each year being considered with reference to the conditions of supply. This view was concurred in by the Board of Revenue.

On the general question of supplying Periyar water to inam and zemin lands suitably situated for double crop in preference to Government waste lands at the tail ends of channels the Board of Revenue has invited the remarks of the Chief Engineer for Irrigation. The Executive Engineer, Madura Division states that a decision to supply Govt. dry lands above referred to in preference to inam and zemin lands will mean a reduction in revenue and in the area irrigated as the water has much further to travel and the irrigated land will not be so compact. The Collector on the other hand states that the object of the project being to secure a large population in years of scarcity from the miseries of famine it is necessary that water should be used for those

areas where rainfall is scanty and uncertain. The Executive Engineer has been asked in this office No.10 M.D., dated 17th January 1902 to submit villagewar details of the extent of inam and zemin lands referred to. This information is awaited.

P.W.D. Irrigation.

U.O. 283 d/ 28-4-04. ~~From the Rev Departme~~

Linked file

D.I.

Please see the foregoing note. In submitting the statement showing the villagewar details of the -- extent of Inam and Zamin lands asked for in Memo No. 10 M.D., dated 17-1-02, the Executive Engineer, Madura Division, stated that the inam and zamin lands were inextricably mixed up with Govt. lands so much so that it was most uneconomical to supply the Ayan (Govt.) lands in preference to inam and zamin. He further stated that it was not practicable for the reasons (1) that the level of the subsoil water had been -- raised and dry cultivation rendered impossible or less productive and (2) that ~~the~~ law suits were -- probable from almost every one of these people. He expressed his strong opinion that no distinction must be made in supplying water to lands whether Govt. or inam and zamin for the following reasons:-

Confdl letter flagged E

D

E

(1) It is very ~~x~~ nearly everywhere impossible to do so
(2) Distinction would mean a fearful waste of valuable water when supplying a scattered ayacut as -- opposed to a compact ayacut.
(3) There is no real reason why the inam people should not be protected against failure of water supply as much as the Ayan people both being subjects ~~x~~ of the crown.
(4) It pays Govt. to supply double crop as opposed to single crop Ayan and
(5) There is no need for distinction when the storage capacity of the project is increased.

C

In Memo No. 102 M dated 4-4-02 the Collector's letter was forwarded to the Board of Revenue with the remark that ~~x~~ Periyar water should be supplied to

to inam and zamin lands, suitably situated for double crop and capable of yielding Rs.7 and Rs.8 per acre for wet and dry lands in preference to Govt.dry lands at the tail ends of channels where only one crop could be grown. It was also pointed out that this was the most economical way of distributing the available water and that the proposal to cut off patches of land here and there because they were inam and zamin was not a practicable one and if attempted was likely to lead to serious difficulties in the future. The Board was further informed that as soon as the storage was increased it would be possible to take in another 20 to 30,000 acres lower down the main channel.

In their Proceedings No.394 (confdl.) dated 6-10-04 the Board of Revenue have submitted to Govt. the decision they have arrived at on the subject of supplying water to zamin and inam lands favourably situated in preference to Govt. lands at the tail end of channels. The Collector's letter printed in the above proceedings gives the full history of the case and in para 21 of it are summed up the seven proposals made by him viz:-

Please see Comments in the Rev Dep. file linked

(i) That the restriction on supplying Periyar water to proprietary lands commanded by the project should be withdrawn (paragraph 10)

(ii) That 6,028 acres of irrigable lands at the tail ends of the channels originally regarded as commanded by the project should now be regarded as only likely to be affected and treated accordingly (paragraph 9 & 12)

(iii) That the proposal to recognise definite double and single crop areas should be dropped (paragraph 15)

(iv) That applications for water for the short crop should be insisted on in the case of mamul wet lands

(v) That whenever in the villages named in enclosure No.2 the Executive Engineer finds it impossible economically to supply water to any field registered as double crop the Collector should be authorised to transfer the field

Printed at the end of B.P. No. 394 (Confd)

to single crop provided the owners agree, and subject to restoration to the doublecrop class at the next settlement

(vi) That the Kodai and Kalam seasons should be fixed and that any person taking water for a kalam crop before August 15th should be subject to a penalty.

(vii) That the sale of 2,200 acres of tank-beds in the tract unfavourably situated for irrigation should be postponed.

All the above suggestions are approved by the Board.

The Revenue Department have now forwarded the Board's Proceedings u.o. for remarks.

Submitted that the file may be returned to that department with the remark that the decisions arrived at by the Board of Revenue are accepted in the -- P.W.D.(Irrgn)

An estimate of Rs. 1,350 for excavating a field channel from Thandalay offtake to Keelamangalam - received from the Supg.Engineer, VI Circle, has been lying over pending the settlement of the question of supply to zamin and inam lands. It will be taken up for consideration when the G.O. of the Revenue Department recording the above B.P. is formally communicated to this department.

[illegible]
19.12.04

2.

We may accept the Boards orders paras 3. 4. & 5.

As regards the last four lines of para 5. heavy expenditure has already been incurred in obtaining this result & a report can be called for stating whether any further instances exist.

As regards para 6, I think we might say that kodai crop should not be encouraged outside the area recommended by Mr Heeling, as suitable for double crop, although as long as the ryots holding lands in this tract do not use all the available water it may be permitted.

The proposal to insist on water applications for wet lands as well as dry should assist the Exec Engr & I would suggest his being allowed the right in exceptional cases of refusing it on the ground simply of excessive wastage

Para 7 The irrigation of the four plots of land in Melur Taluq and of the small plots in Kalikappan & Tamarapatti villages in Madura taluq must cause such enormous waste of water if as seems to be the case there is no other land near them cultivated with kodai crop that a concession to the purchasers in the form of return of parts of the purchase money would seem distinctly advisable. I am well acquainted with all these places & know the light absorbtive nature of the soil. If some of the purchasers accept the terms offered & others do not the state of matters becomes worse than before.

Get rid of them at any cost.

Paras 8 & 9 may be accepted.

TWSS
20/12/04.

I have just gone over the case with

Mr Kiling and think the Board's decisions may be accepted.

(Init.)
21.12.07

[The above remark of "I" was entered in the Rev Deptt. file which was returned to that Deptt.]

Re: Economical distribution of Periyar Water. Madura Dt.

Revenue Departm

C. No. 6128 / Confl: 196, from the Board R.S. No. 394 / Press dated 6-10-04.

To Under Secretary.

The B.P. calls for no remarks. It is submitted that the current may be recorded with the concurrence of the P.W.D.

Secretary.

Mr. Knapp gives full reasons for his proposal. And we may accept the Boards decisions

(Snd) F.B.E.
23.11.04.

(Snd) J. N. A.
24-11-04.

Rev. Dpt. u.o. Dno. 1127
25-11-04.

P.W.D. (I) u.o. for favour of remarks.

Submitted that the file may be returned to the Rev. Dpt: with the remark that the ~~decisions~~ decisions arrived at by the Board of Revenue are accepted in the P.W.D. (Irrgn)

(Snd) T.R.
19.12.04.

R. 283. u.o.
28.11.04.

P. W. D. IRRIGATION.
4898
Dated 21-12 1904

Yes. I have gone over the case with Mr. Keeling.

(Snd) A.H.G.
21.12.04.

Rev. Dpt. u.o.

P.W.D.Irrigation.

(P.W.C.No.922) G.O.No.1420 Rev.(Confdl.) d/31-12-04.

Recd in Thursday on 28.1.05

Note

Original of this G.O was given to S.E. in connection with the Periyar water Levies file. A copy thereof has been obtd & put up on file.

D.I.

The accompanying draft order is submitted for - approval.

2. In the revised forecast approved by the Board of Revenue which accompanied the completion report of the Periyar project, the ultimate area to be brought under irrigation was shown as 126,955 acres (first crop) and it was expected that this area would be - reached in 1909-10. But the Board's Proceedings recorded in the order noted above reduces the ultimate area to 109,272 acres. It is considered that the reduced figures if accepted as final will affect the return anticipated from the Capital Outlay.

page 7 of Periyar Completion Report (Flag I)

naturally

3. An estimate amounting to Rs.4,93,984 for increasing the storage capacity of the Periyar lake was sanctioned in G.O.No.211 I dated 24th February 1905 and the Supg. Engineer asked to submit in consultation with the Collector a report on the extension of irrigation likely to result from the increased storage.

4. In Memo No.1049 dated 27th March 1905 the Board of Revenue has also been asked to ~~refer~~ offer its - opinion on the proposal to extend cultivation under the Periyar project by 25,000 acres giving at the - same time an estimate of the Revenue which might be - expected. This extension was not presumably taken into account in the revised ultimate area referred to above.

of course not.

5. It is submitted that when the report ... asked for in the accompanying draft order is received from the Supg. Engineer, it may be forwarded to the Board of Revenue with a request to furnish a re-revised

forecast of revenue for the project taking also into consideration the proposed extension of irrigation due to increased storage.

[initials]
11.4.05

E. 9

I don't see any use in this in reporting on the proposed extension the revised figures will naturally be taken into consideration; the Board's revised figures have been prepared after careful consideration by the Collr & Exec Engr and no reasons at all have been adduced by the office for supposing that the Ex Engr's opinions have undergone alteration.

[signature]
19/4/05

I agree.

[initials]
19.4.05

D.I.

The question of the ultimate area to be --
expected from the project will presumably be --
considered again by the Board of Revenue when --
replying to the reference made to them in Memo.

Flag XX

No.1049 dated 27th March 1905 asking for a forecast of revenue consequent on the increased storage of water in the lake. It is submitted that, when their reply is received, a report may be made to the Government of India on the question of ultimate area.

The Revenue G.O., may, it is submitted, be communicated to the Supg. Engineer without any remarks.

aom
28.4.05

yes
[illegible]
28/4/05

[illegible]
28.4.05

C.S.

Please see J's pencil note in the draft order &

2 ~~After the issue of the order~~, return the file to Ooty, arranging after issuing the G.O.

ASM
28.4.05

J.o.

C.S. Please return the file to J. after despatch

W

[illegible]
1.5.05

[illegible]
8/5

[illegible]
3/5/05

PUBLIC WORKS DEPARTM

IRRIGATION BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ the following

G.O.No.1420 (Confidential) dated 31st December 1904.

Order No 429 I. dt 4.5.05.

Communicated to the officers concerned.

2. It is observed from the revised forecast appended to the report on the closure of the construction estimate of the Periyar Project that the ultimate area under the project was with the approval of the Board of Revenue fixed at 126,955 acres. But the Board's Proceedings recorded in the order read above reduces the ultimate area to - 109,272 acres. With reference to this reduction the Supg. Engineer, VI Circle, will be requested to report whether there is no likelihood of the revised forecast being realised.

Issue

I.

28.4.05

D.I.

To

The Chief Engr.for Irrgn.
" Supg.Engr.VI Circle
" [illegible]

8/4/05

DESPATCHED
-5 MAY 1905

E. I. Form No 1—500—7-4-04.

106/98)Ri/OB12